



# **Bike Path Investigation and Excavation Work Plan**

**March 2019**

*Prepared For  
Madison-Kipp Corporation  
Madison, Wisconsin*

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# Section 1

## Introduction

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### 1.1 Background

The City of Madison (the City) owns and maintains the Capital City Bike Path that is located to the north of Madison Kipp Corporation's (MKC) facility located at 201 Waubesa Street, Madison, Wisconsin (Site). Based on a review of the as-built plan set from 1994, a 10-foot wide path was constructed along a former railroad corridor purchased by the City and consists of two inches of asphaltic pavement over a six-inch crushed aggregate base course layer. The typical section for this construction also called for 12 inches of breaker run beneath the aggregate layer as needed. The as-built profile shows that the top of the path near MKC's property was constructed close to existing grade. This would indicate that a minimum of eight inches to up to 20 inches of soil removal was required to construct the path. Attachment 1 includes as-built drawings provided by the City.

The City has proposed to resurface various sections of the bike path in 2019 including the section north of MKC's property. The City plans to pulverize, grade, and compact the current asphaltic layer and finish the path with three inches of new asphaltic pavement. Attachment 2 provides proposed construction documents for the new path.

Based on the planned reconstruction, in July 2018, the City contacted the Wisconsin Department of Natural Resources (WDNR) and requested that MKC complete an investigation to determine if polychlorinated biphenyl (PCB) impacted soil was present below the bike path from historical uses in the area. Based on path proximity to MKC's property, the City requested that an investigation be completed to allow for impacted soil to be removed, if present. No removal of underlying soils are proposed for the reconstruction project; however, with removal of the bike path surface, the City would like to remove PCBs if present. MKC was approached to complete the investigation given prior remedial actions MKC conducted to remediate PCB impacted soil south of the path which is regulated under the WDNR Bureau for Remediation and Redevelopment Tracking System (BRRTS) Site case number is #02-13-562649.

Based on the City's request, a site walk was held with the WDNR, the City, MKC, and TRC Environmental Corporation (TRC) to discuss the investigation. To the north of the bike path, the City's Goodman Community Center is a closed BRRTS Site #02-13-552584 and #02-13-262205 with continuing obligations to maintain a cap up to the northern limit of the bike path. To the south of the bike path, MKC's BRRTS Site #02-13-576860 has continuing obligations to maintain a cap up to the City's property. TRC has prepared this document on behalf of MKC to

document the investigation and possible excavation discussed during the site walk and subsequent meetings with WDNR.<sup>1</sup>

## 1.2 Purpose and Scope

On behalf of MKC, TRC has prepared this work plan for the investigation and removal (if necessary) of soils underlying the Capitol City Bike Path located on the City's property north of the Site. The objectives of the investigation are to determine:

- If PCB-impacted soil is present below the path; and,
- If impacts are identified, what concentrations are present and if results indicate other potentially responsible parties' involvement (e.g., PCB Aroclors not found on MKC properties or at concentrations not representative of conditions adjacent the bike path).

If PCB impacts are present and require removal as described herein, an excavation plan for remedial action is included in this work plan for use.

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<sup>1</sup> This is a voluntary action being taken by MKC pursuant to the NR 700 rule series. There are known other potential sources of PCBs in the area and the railroad corridor itself could be a source of PCBs. By undertaking this investigation, MKC in no way waives (and specifically reserves) any and all defenses to allegations of responsibility for the findings of the investigation, based on the existence of these additional and other potential PCB sources.

## Section 2

# Soil Investigation Plan

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Per discussions with the WDNR, MKC will complete a soil investigation to meet the two objectives outlined in Section 1.2 of this work plan.

### 2.1 Soil Investigation Overview

The soil investigation will include the installation of six direct push soil borings along an approximate 465-foot section of the bike path to the north of MKC's property. The proposed borings will be equally spaced every approximately 93 feet. It is assumed based on the 1994 as-builts that the first 20 inches or less of material could potentially be imported breaker run, aggregate, and/or asphaltic pavement. The soil underlaying these materials (where present) will be the focus of the investigation which includes:

- Installation of soil boings at the approximate locations shown on Figure 2.
  - The soil borings will be installed along the center line of the bike path; however, the specific location of each boring will be based on professional judgment, field observations, and access restrictions.
  - Borings will be installed to approximately four ft bgs, subject to field observations.
  - Borings will be continuously sampled across the length of the boring.
- Collection of up to two soil samples from each boring. One sample will be collected from ground surface to two foot below, focusing on what appears to be below the imported material from the previous path construction (i.e. aggregate or breaker run materials). A second sample will be collected from soil between two and four feet below ground surface. Table 1 includes a summary of each sample and Figure 2 shows the proposed location of each soil boring.
- One boring exhibiting visual and olfactory evidence of contamination (if present) will be held for laboratory analysis of RCRA metals, chloride, VOCs, SVOCs, flash point, reactive cyanide, reactive sulfide, Diesel Range Organics, and Gasoline Range Organics for waste characterization purposes. The sample will also be held for TCLP VOCs and other Protocol B analyses if required by the disposal facility. The sample will be field selected based on observations. This sample will be held for laboratory analysis pending the results of the soil samples being analyzed for PCBs. If necessary for waste disposal and/or IDW disposal, some or all of the waste characterization analyses will be run by the laboratory.
- Submittal of soil samples collected from each boring for laboratory analysis for PCBs.
- Abandonment of each borehole following sampling.

Note that previous use as a rail corridor with ballast and the potential of 6-inch breaker run installed as part of the bike path construction may hinder the direct push investigation. If refusal is encountered at a proposed boring location, TRC will make best efforts to step out to a location that can be sampled to the proposed depth. It is possible that one or more investigation locations may have to be abandoned if a suitable sample location cannot be found that allows sample collection to the proposed depth. Multiple sample locations over the same sample interval may need to be combined to obtain sufficient volume of soil for laboratory analysis. At some locations, if the ballast/breaker run cannot be penetrated, only the 0-2 ft sample interval may be obtained.

## **2.2 Investigation Procedures**

This section describes the specific sampling equipment and methodology to be used for site investigation activities described above.

### **2.2.1 Traffic Control**

MKC assumes since the City has requested the investigation, the City will allow MKC to schedule the work and traffic control for the bike path as necessary. MKC will work to exclude others from the bike path during performance of the work by providing signs and an alternate route, if needed. The investigation is anticipated to take less than one day. MKC will complete all rerouting, signage, and traffic control.

### **2.2.2 Utility Clearance**

Prior to site mobilization and sampling, Diggers Hotline will be called, and the site will be marked to indicate where identified underground utilities are located. TRC assumes no private utilities are present on the City's property.

### **2.2.3 Boring Installation and Soil Sampling**

Soil borings will be advanced using a direct-push technology (DPT) drilling method. Soil sampling will be conducted continuously from the ground surface to the total depth of the boring. The soil samples will be collected using a new, clear plastic sampling liner for each sample interval. The interval length for the direct push drilling method will be 4 or 5 feet, depending on the specific drilling equipment used.

Each soil-filled liner will be split open and the contents will be described in a field log in accordance with the Unified Soil Classification System (USCS). The soil core will be divided into sample intervals (e.g., 0 to 2 feet, and 2 to 4 feet bgs). A portion of soil from each sample interval will be placed into a clean plastic bag for field screening with a

Photoionization Detector (PID). For intervals designated for laboratory analysis based on field observations, a portion of soil will be placed in appropriately labeled laboratory sample containers and placed on ice for transport to the laboratory.

Excess soil will be placed in containers and managed as investigation-derived waste (IDW) in accordance with Section 2.2.10. Sample processing equipment may be single-use and disposable or may be re-used at the discretion of the field crew, if these materials can be adequately decontaminated following use. All downhole sampling equipment and any other non-dedicated, non-disposable sampling equipment will be decontaminated in accordance with Section 2.2.9 prior to collecting the next sample.

#### **2.2.4 Soil Sample Identification**

Each sample of soil collected from the soil borings will be assigned a unique alphanumeric sample descriptor identifying the sample location and relative depth.

Each soil boring location will be identified with a "BP-", followed by a location number assigned sequentially in the order of installation. Sample IDs for these locations will contain the sample location followed by a sample number and letter representing the depth of collection. An "A" will identify the shallow ground surface to two-foot bgs sample and a "B" will represent the two to four-foot bgs interval sample. The sample ID and depth of collection will be recorded in the field notes.

#### **2.2.5 Sample Shipment and Laboratory Analysis**

Soil samples for laboratory analysis will be placed in appropriate sample containers (i.e. 4 oz. amber glass jar) provided by the laboratory. Sample containers will be placed on ice immediately after collection and transported to PACE Analytical in Madison, WI under proper chain of custody. Each sample will be analyzed for PCBs using EPA Method 8020 assuming a standard two-week turnaround time. Table 1 includes a summary of the proposed samples and a list of the PCB Aroclors that will be reported.

#### **2.2.6 Quality Assurance**

The overall Quality Assurance and Quality Control (QA/QC) objective is the use and implementation of procedures for sample collection, field documentation, sample custody, analytical methodology, field and laboratory QA/QC, and reporting that provide results of sufficient level of quantitation that allows the data to be compared to applicable regulatory standards. The overall QA/QC objective of the laboratory analytical program is to generate data of known precision and accuracy.



### **2.2.7 Borehole Locations**

The final locations of soil borings will be logged using differential global positioning system (GPS) techniques. A Trimble Geoexplorer handheld GPS unit, with H-Star technology enabled (or equivalent), will be used to collect these locations. Where field conditions permit, carrier-phase signal data will be used for GPS data collection. When collecting GPS location data, field staff will continuously log a sample position until the predicted post-processed accuracy is better than 1 foot, or until 30 position readings have been collected. All data collected with the Trimble GPS unit will be post-processed through the software program Trimble Pathfinder Office using nearby reference station Global Navigation Satellite System (GNSS) reference data, as available. GPS and survey data will be projected into the State Plane coordinate system (NAD83, US Feet).

### **2.2.8 Borehole Abandonment**

Boreholes will be abandoned in accordance with NR 141.25. The direct-push tooling will be removed, and the open portion of the borehole will be plugged using bentonite chips, bentonite granules, or a high-solids bentonite grout to within three to six inches of the ground surface. Assuming all six borings will be installed through a paved area, the surface will be patched with asphaltic cement as appropriate.

### **2.2.9 Decontamination of Equipment**

Single-use sampling equipment and materials will be used wherever possible. Single-use equipment may include, but is not limited to, nitrile gloves, plastic sampling syringes, and plastic core barrel liners. Non-single-use sampling equipment, such as direct-push cutting shoes and core barrels, will be decontaminated between uses by washing with a non-phosphate detergent solution and rinsing with potable water.

### **2.2.10 Investigation-Derived Waste**

IDW streams generated during this investigation are expected to include soil cuttings/excess sample material and general refuse (e.g., used personal protective equipment, single-use sampling equipment, and trash). Soil cuttings and excess sample material will be containerized, labeled with the date and contents, and left on-site pending characterization results. Soil will be disposed offsite by an approved contractor at a licensed disposal facility. General refuse will be collected in trash bags and placed in a waste dumpster.

# Section 3

## Remedial Action Soil Excavation

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### 3.1 Soil Management Plan

MKC understands the City agrees to replace the bike path and maintain it as a cap with institutional controls if PCBs are present beneath the existing bike path. MKC will investigate the bike path by installing six soil borings as described in Section 2 of this work plan. If PCBs are encountered at concentrations above 10 ppm but less than 50 ppm, MKC will remove soil by excavation of bulk PCB remediation waste as described in this section. If PCBs are present in the soil samples collected during the investigation at levels greater than 50 ppm, MKC will discuss the results with WDNR but no excavation will be performed by MKC.

### 3.2 Excavation Plan Overview

If PCB impacted soil is identified and requires removal, soils will be hauled off-site for disposal at a licensed landfill permitted for acceptance of PCB waste at the concentrations encountered.

Based on the initial soil investigation, samples containing PCBs above the 10 ppm threshold will be excavated. A waste profile will be completed based on the initial site investigation results. An approximate 10 feet by 10 feet excavation around borings with threshold exceedance will be conducted. Excavation depths may vary between two and four feet bgs and will be dependent on the initial soil investigation results collected from the upper and lower two-foot intervals. The following scenarios may apply:

- If initial results indicate that PCB impacted soil is present in the upper and lower intervals or in the lower interval only, the excavation will be completed to a depth of four feet bgs.
- If initial results indicate that PCB impacted soil is present above 10 ppm in the upper interval but not present in the lower interval, excavations will be completed to two feet below ground surface.

### 3.3 Excavation Procedures

MKC will subcontract with qualified excavation contractor to complete the soil excavations.

#### 3.3.1 Construction Zone Traffic Control

MKC has assumed that the bike path rerouting work will be completed by the City or its contractor as part of the reconstruction. If remedial action work is completed prior to path closure, MKC will work with the City to obtain access to the path and to exclude others

during performance of the work. The City will complete all rerouting, signage, and traffic control. Temporary construction fences will be erected around the localized excavation area, as needed unless the City's fence/traffic control is sufficient to prevent entrance to the excavation and will be dependent on the City's construction activity.

### **3.3.2 Utility Clearance**

Prior to site mobilization and excavation activity, Diggers Hotline will be called and the site will be marked to indicate where identified underground utilities are located. TRC assumes no private utilities are present on the City's property.

Note that there is a known fiber optic utility to the south of the bike path. The planned excavation limits are to the edge of the bike path pavement. If the fiber optic utility is marked as present underneath the bike path in an excavation area, hand-dig methods will be utilized to determine the location through visual verification prior to excavation.

### **3.3.3 Excavation and Disposal**

Following waste approval soils will be excavated and loaded into either trucks or in roll off containers for disposal and treatment depending on the concentrations reported. If soils are containerized in roll offs, provided covers will be used to cover staged soils following each day of work.

### **3.3.4 Backfill**

The excavation will be backfilled to match existing conditions. Specifically, breaker run (6-inch minus stone or concrete, refer to Wisconsin Department of Transportation Specification 19, Section 311) will be used to bring the excavation to 6-inches below existing grade. From 6-inches to grade, the excavation will be backfilled with crushed aggregate base course (2-inch minus, refer to Wisconsin Department of Transportation Specification 19, Section 301). Crushed aggregate base course may be used in lieu of breaker run depending on availability and cost. The City will be responsible for any modifications necessary to restore the bike path surface (e.g., final grading), restoration of the bike path surface, and all topsoil/seeding/restoration of the surrounding area.

### **3.3.5 Dust Monitoring**

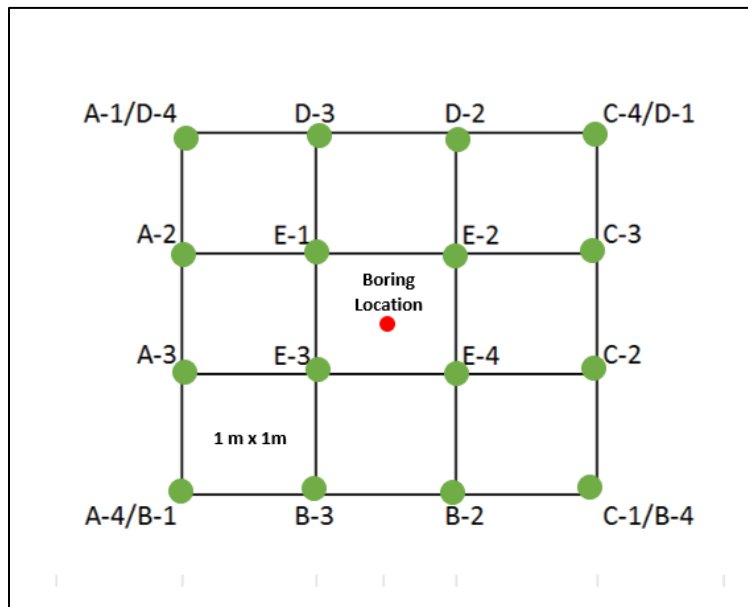
Dust monitoring will be completed during each excavation and engineering controls will be used to minimize dust accumulation during excavation activity.

### 3.3.6 Excavation Limits

The final excavation limits will be logged using differential GPS techniques as outlined in Section 2.2.7.

## 3.4 Confirmation Soil Sampling

If any soil excavation is required based on the results of the investigation, MKC will conduct verification samples as required by Subpart O of 40 CFR §761. Specifically, each soil excavation will be approximately 100 square feet(sq ft) (10 feet by 10 feet) surrounding the boring with PCB concentration in soils above 10 ppm. TRC proposes five verification samples be composited from locations on a 1.0-meter grid beginning at one corner of the excavation as shown on Figure A below. For the proposed excavation area, there will be 16 sample locations that will be composited into the five verification samples.



**Figure A: Proposed Confirmation Sample Grid**

Samples will be collected along each of the four edges (A, B, C, D) and composited from those four sample locations. In addition, the four interior samples (E) will be collected at the base of the excavation and composited to be the fifth verification sample.

### 3.4.1 Soil Sample Identification

Each sample of soil collected from the excavations will be assigned a unique alphanumeric sample descriptor identifying the sample location.

### **3.4.2 Sample Shipment and Laboratory Analysis**

Soil samples for laboratory analysis will be placed in appropriate sample containers (i.e. 4 oz. amber glass jar) provided by the laboratory. Sample containers will be placed on ice immediately after collection and transported to PACE Analytical in Madison, WI under proper chain of custody. Each confirmation sample will be analyzed for PCBs using EPA Method 8020. Expedited sampling is anticipated to allow for excavations to be completed and backfilled.

### **3.4.3 Quality Assurance**

The overall Quality Assurance and Quality Control (QA/QC) objective is the use and implementation of procedures for sample collection, field documentation, sample custody, analytical methodology, field and laboratory QA/QC, and reporting that provide results of sufficient level of quantitation that allows the data to be compared to applicable regulatory standards. The overall QA/QC objective of the laboratory analytical program is to generate data of known precision and accuracy.

### **3.4.4 Confirmation Sample Locations**

The final locations of confirmation samples will be logged using differential GPS techniques as discussed in Section 2.2.7.

### **3.4.5 Decontamination of Equipment**

Single-use sampling equipment and materials will be used wherever possible. Single-use equipment may include, but is not limited to, nitrile gloves and protective boot covers. Non-single-use sampling equipment, will be decontaminated between uses by washing with a non-phosphate detergent solution and rinsing with potable water.

## **3.5 Post Excavation Scenarios**

Based on the concentrations present in the verification samples, the following actions will be taken:

- If the north or south edge/sidewall verification sample is above 10 ppm, the area will be noted under the existing cap maintenance plans for the BRRTS number of the adjacent cap as well as the new bike path institutional control.
- If the east or west edge/sidewall verification sample is above 10 ppm, additional excavation will be conducted by extending the excavation area 1.0 meter (approximately 3 feet) beyond the exceedance. Following excavation, an additional four sample points along the above grid spacing will be collected and composited for a new edge/sidewall sample of the new excavation area. Based on the concentration present in the verification sample, the

procedure will either be repeated, or the excavation of that area will be completed if the concentration in the verification sample is below 10 ppm. Depending on results, sampling may be adjusted to ensure impacted soil is removed but to minimize sampling density (e.g., excavations of less than 1.0 meter in additional size may be utilized). If any revisions to this excavation plan are needed, MKC will submit an addendum to this plan for approval by the WDNR.

- If the base verification sample concentration is above 10 ppm and the base of the excavation is 4-feet below existing grade, the excavation will be backfilled and the area will be noted under the new bike path institutional control and cap maintenance plan.
- If the base verification sample concentration is above 10 ppm and the base of the excavation is less than 4-feet below existing grade, the excavation will be extended to 4-feet below ground surface across the entire area of the excavation. Following excavation, an additional four sample points along the above grid spacing will be collected and composited for a new base verification sample and the excavation area will be backfilled. If results of the new base verification sample indicate a concentration above 10 ppm, the area will be noted under the new bike path institutional control and cap maintenance plan.

## Section 4

# Scheduling and Reporting

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### 4.1 Schedule/Reporting

Site investigation activities will be initiated following WDNR's approval of this workplan and based on the proposed construction schedule from the City. The results of the investigation will be provided to the WDNR in a letter-style report which will propose remedial action efforts if needed (i.e. excavation limits) in conformance with this excavation work plan. If remedial efforts are required, work will be completed based on the City's construction schedule and approval from the WDNR of planned remedial efforts. If excavation is required, a follow-up letter-style report will be submitted to WDNR to document the remedial action.

Table 1  
Bike Path Proposed Sampling Plan Summary  
Madison-Kipp Corporation  
201 Waubesa Street  
Madison, Wisconsin

SAMPLE DETAILS			POLYCHLORINATED BIPHENYLS BY EPA METHOD 8082 (Limit of Detection)									WASTE CHARACTERIZATION SAMPLE <sup>(1)</sup>
SAMPLE POINT	SAMPLE ID	SAMPLE DEPTH (ft-bgs)	PCB-1016 (0.0046)	PCB-1221 (0.0066)	PCB-1232 (0.0044)	PCB-1242 (0.0090)	PCB-1248 (0.0086)	PCB-1254 (0.0073)	PCB-1260 (0.0071)	PCB-1262 (0.0063)	PCB-1268 (0.0044)	ANALYSES TBD
BP-1	BP-1A	0-2	X	X	X	X	X	X	X	X	X	
	BP-1B	2-4	X	X	X	X	X	X	X	X	X	
BP-2	BP-2A	0-2	X	X	X	X	X	X	X	X	X	
	BP-2B	2-4	X	X	X	X	X	X	X	X	X	
BP-3	BP-3A	0-2	X	X	X	X	X	X	X	X	X	
	BP-3B	2-4	X	X	X	X	X	X	X	X	X	
BP-4	BP-4A	0-2	X	X	X	X	X	X	X	X	X	
	BP-4B	2-4	X	X	X	X	X	X	X	X	X	
BP-5	BP-5A	0-2	X	X	X	X	X	X	X	X	X	
	BP-5B	2-4	X	X	X	X	X	X	X	X	X	
BP-6	BP-6A	0-2	X	X	X	X	X	X	X	X	X	
	BP-6B	2-4	X	X	X	X	X	X	X	X	X	

Footnotes:

- Each sample will be field screened and one waste characterization sample will be collected from the sample containing the highest PID reading/visual/olfactory indications of contamination. Refer to Section 2 for potential waste characterization analyses. The final analysis list is subject to requirements of the waste disposal facility.

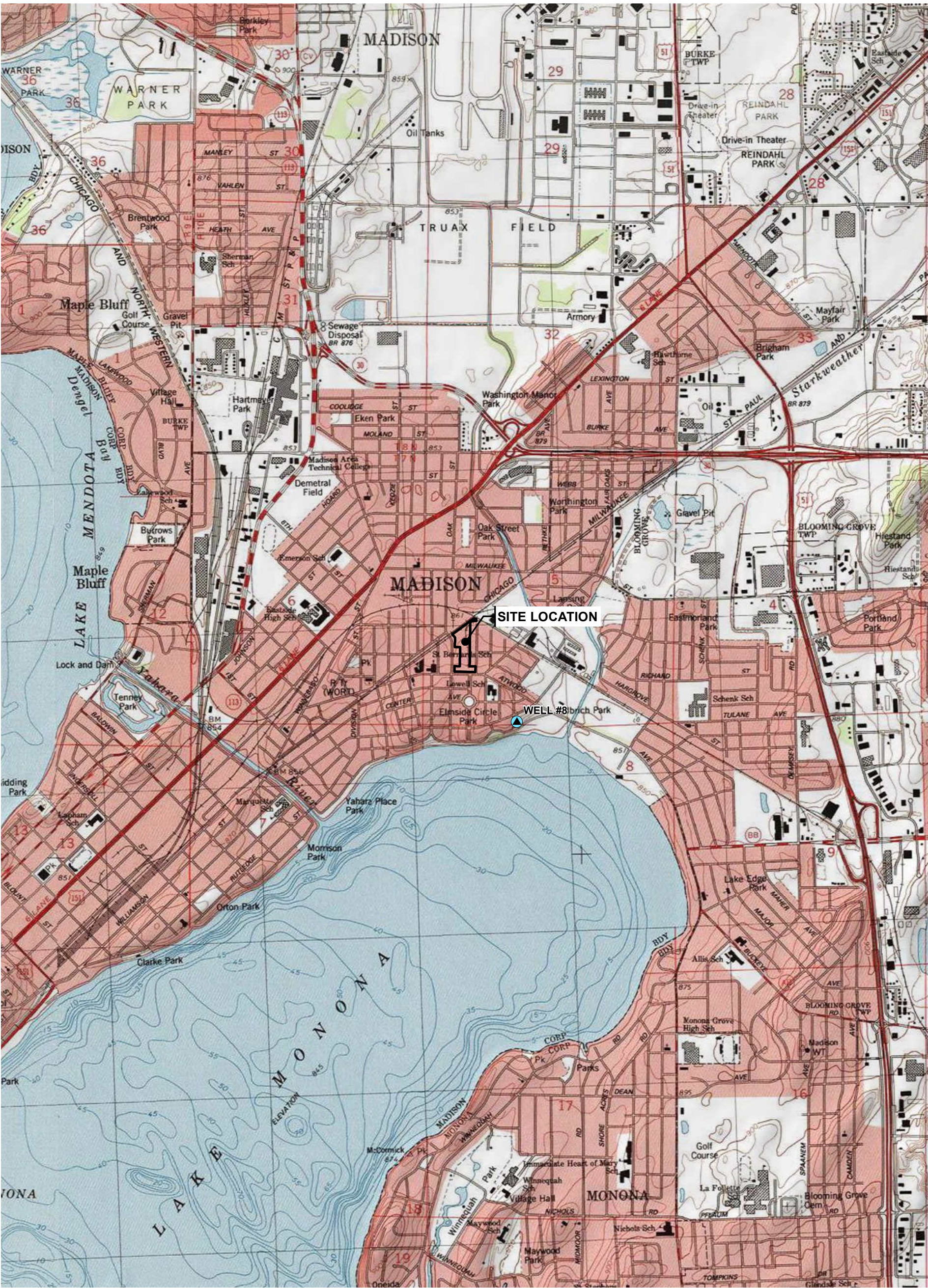
Notes:

PID = Photoionization Detector

Created By A. Stehn 3/12/2019

Checked By: K. Vater 3/13/19

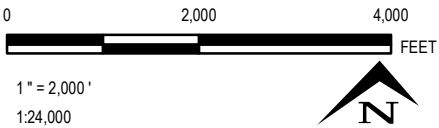




LEGEND

- SITE PROPERTY BOUNDARY
- MUNICIPAL SUPPLY WELL

BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE SERIES, "USA TOPO MAPS" WEB BASEMAP SERVICE LAYER.



708 Heartland Trail  
Suite 3000  
Madison, WI 53717  
Phone: 608.826.3600

PROJECT:

MADISON-KIPP CORPORATION  
201 WAUBESA STREET  
MADISON, WISCONSIN

TITLE:

SITE LOCATION MAP

DRAWN BY:	J. PAPEZ
CHECKED BY:	A. STEHN
APPROVED BY:	K. VATER
DATE:	MARCH 2019
PROJ. NO.:	323372-007
FILE:	323372-007-001slm.mxd

FIGURE 1





**LEGEND**

- PROPOSED SOIL BORING
- PARCEL BOUNDARY
- COMMUNICATION (FIBER OPTIC)
- GOODMAN COMMUNITY CENTER CAPPED AREA
- MKC (#02-13-576860) CAPPED AREA
- UTILITY BUFFER
- SOIL COVER
- EXCAVATION AREA
- BIKE PATH

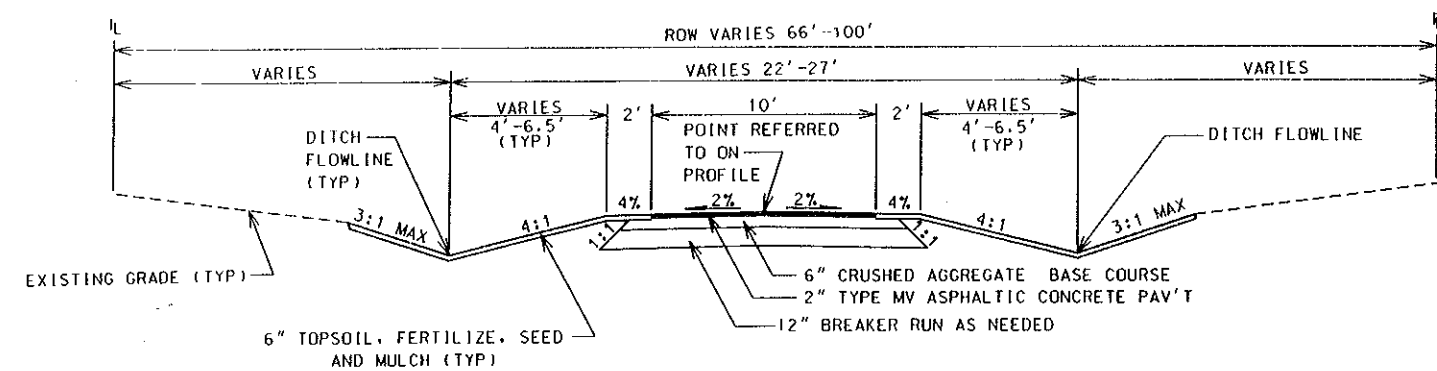
PROJECT:		<b>MADISON-KIPP CORPORATION 201 WAUBESA STREET MADISON, WISCONSIN</b>	
TITLE:		<b>PROPOSED SOIL BORING LOCATIONS</b>	
DRAWN BY:	J. PAPEZ	PROJ NO.:	323372
CHECKED BY:	A. STEHN	<b>FIGURE 2</b>	
APPROVED BY:	K. VATER		
DATE:	MARCH 2019		
		708 Heartland Trail Suite 3000 Madison, WI 53717 Phone: 608.826.3600	
FILE NO.:		323372-007-002.mxd	



# Attachment 1

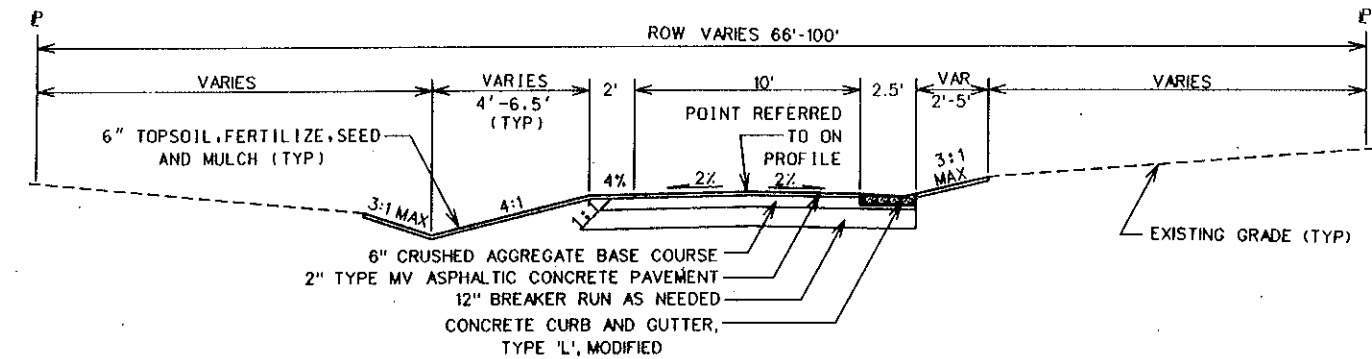
## 1994 Bike Path As-builts

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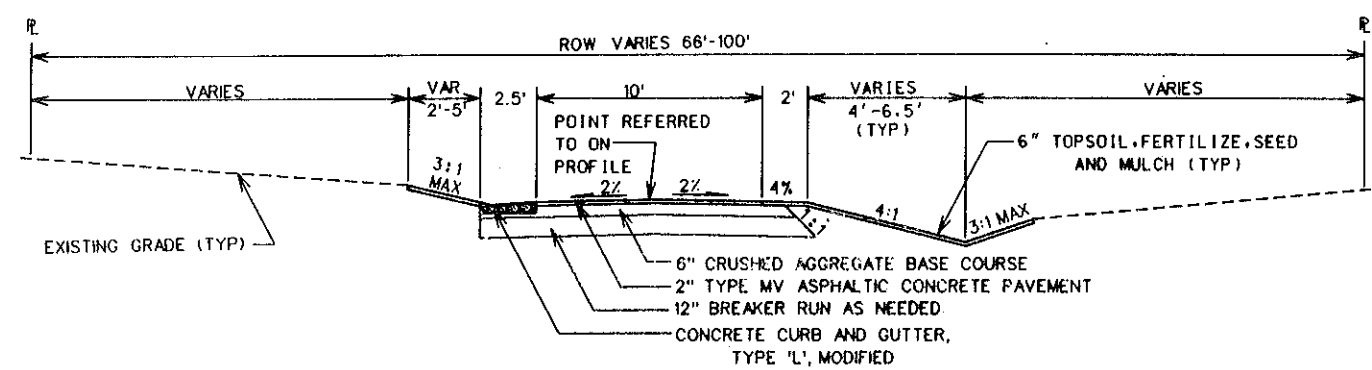
PROPOSED TYPICAL SECTION  
EAST RAIL BIKE PATH

STA 12+50 - STA 14+25	STA 36+77 - STA 40+35	STA 78+25 - STA 87+17	STA 108+55 - STA 111+82
STA 16+94 - STA 22+89	STA 63+20 - STA 72+17	STA 87+84 - STA 98+52	STA 121+71 - STA 123+85
STA 23+54 - STA 29+50	STA 72+69 - STA 73+27	STA 99+83 - STA 103+60	STA 124+35 - STA 131+15
STA 30+15 - STA 36+11	STA 74+23 - STA 75+00	STA 105+50 - STA 107+80	



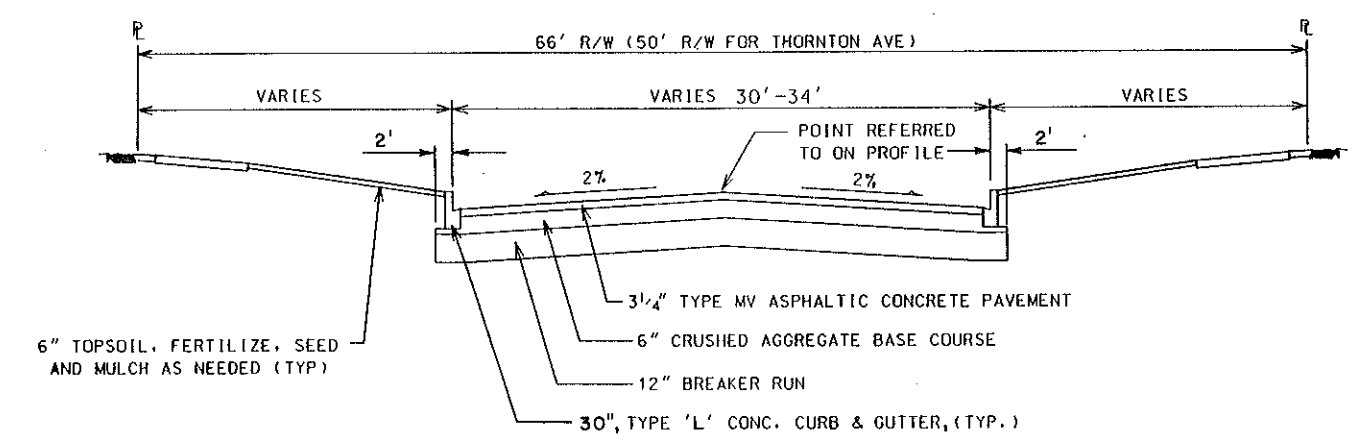
PROPOSED TYPICAL SECTION  
EAST RAIL BIKE PATH

STA 14+25 - STA 16+29



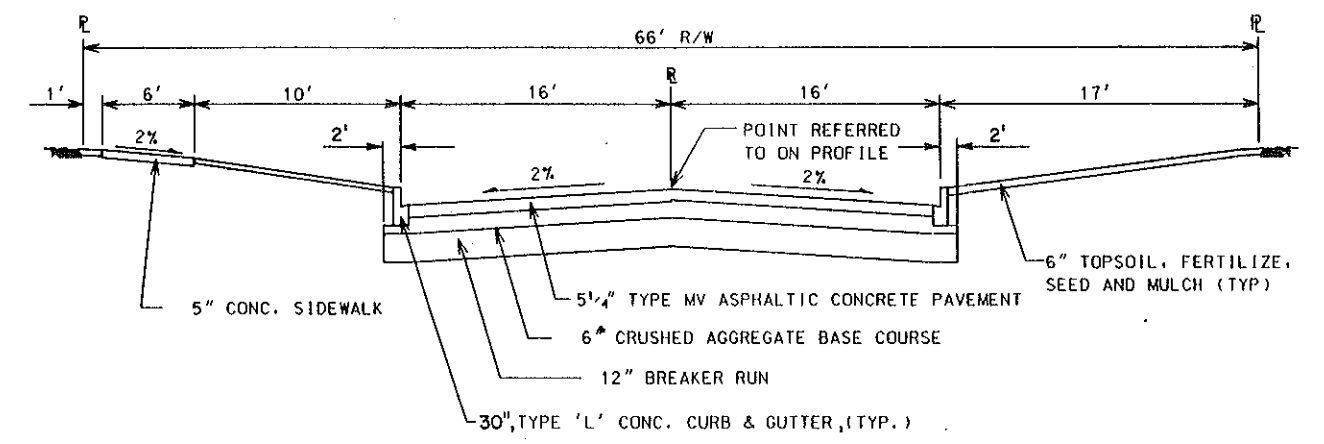
PROPOSED TYPICAL SECTION  
EAST RAIL BIKE PATH

STA 112+35 - STA 121+08



PROPOSED TYPICAL SECTION

LIVINGSTON, THORNTON,  
DUNNING & ST PAUL



PROPOSED TYPICAL SECTION

EAST WILSON STREET

LEVELS ON - 1.2, 3.4, 4.5, 6.7, 8.9, 10.1, 12.13, 14.15, 16.17, 18.19, 20.21, 22.23, 24.25, 26.27, 28.29, 30.31, 32.33, 34.35, 36.37, 38.39, 40.41, 42.43, 44.45, 46.47, 48.49, 50.51, 52.53, 54.55, 56.57, 58.59, 60.61, 62.63

Durline Scales &  
Manufacturing Inc.  
149 Waubesa St.  
0710-053-0501-8

### RAIL CORRIDOR

DANE COUNTY

N50°40'53"E

MATCH EXISTING

EDGE OF ASPHALT

## INCH TREES

EDGE OF ASPHALT

Madison Brass Works  
206 Waubesa St.  
0710-053-0735-3

P.I. #41 DATA

$$\begin{aligned} P.I. &= 123 + 97.92 \\ Y &400,217.08 \\ X &2,175,316.09 \\ \Delta &= 2^\circ 45' 40'' \end{aligned}$$

### LEGEND

 CONCRETE

P I #43 DATA

$$\begin{aligned} P.1. &= 124 + 22.01 \\ Y &= 400.232.34 \\ X &= 2.175.334.73 \\ A. &= 2^{\circ}46'56'' \end{aligned}$$

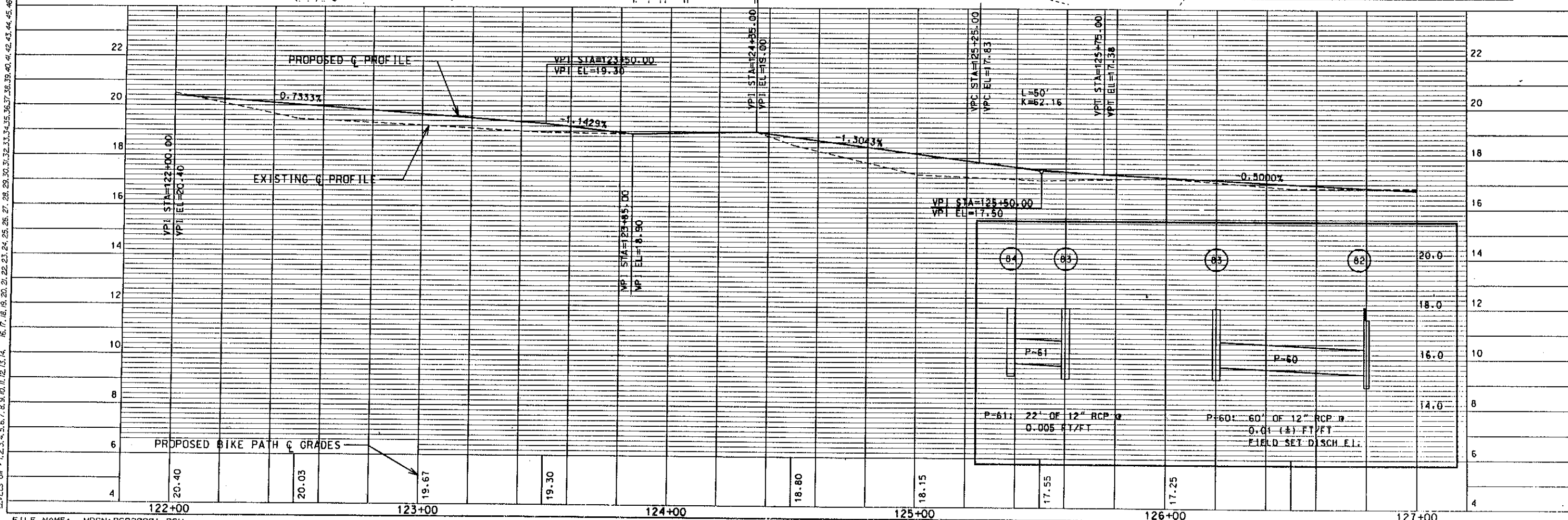
Madison Kipp Corp.  
201 Waubesa St.  
0710-053-0801-2

P. 1. #43 DATA

$$\begin{aligned} P.I. &= 125 + 48.68 \\ Y &400.307.75 \\ X &2.175.436.51 \\ \Delta. &= 0^{\circ} 58' 07'' \end{aligned}$$

## BENCHMARKS

STA/LOC	DESCRIPTION	ELEV
124+31/46.9 RT	CHISELED 'X' IN S/W	17.96



STA/LOC	DESCRIPTION	ELEV
127+47/5.7' LT	7" NAIL W/PUNCH	16.55

STATE PROJECT NUMBER 5992-01-04 & 06	SHEET NO. 520
PLAN & PROFILE, STORM SEWER FOR	
E RAIL CORRIDOR	DANE COUNTY

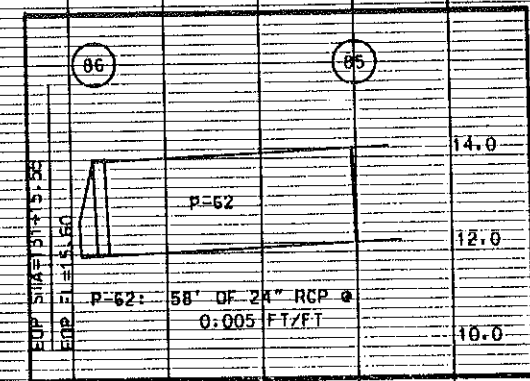
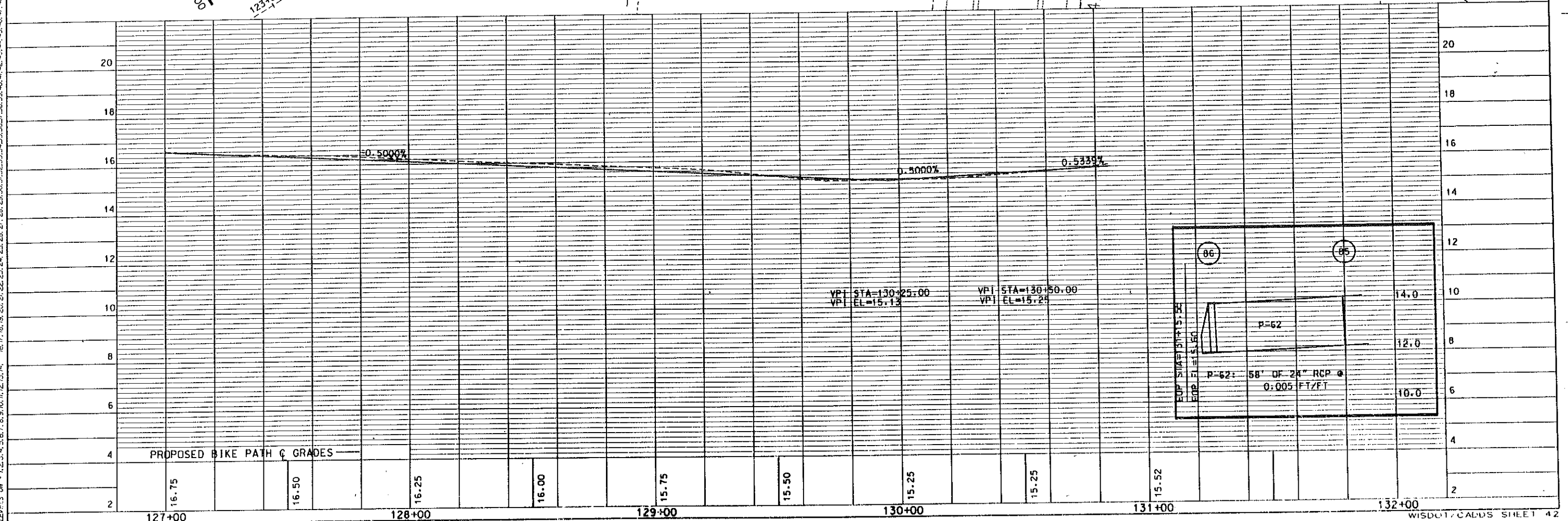
NOTE:

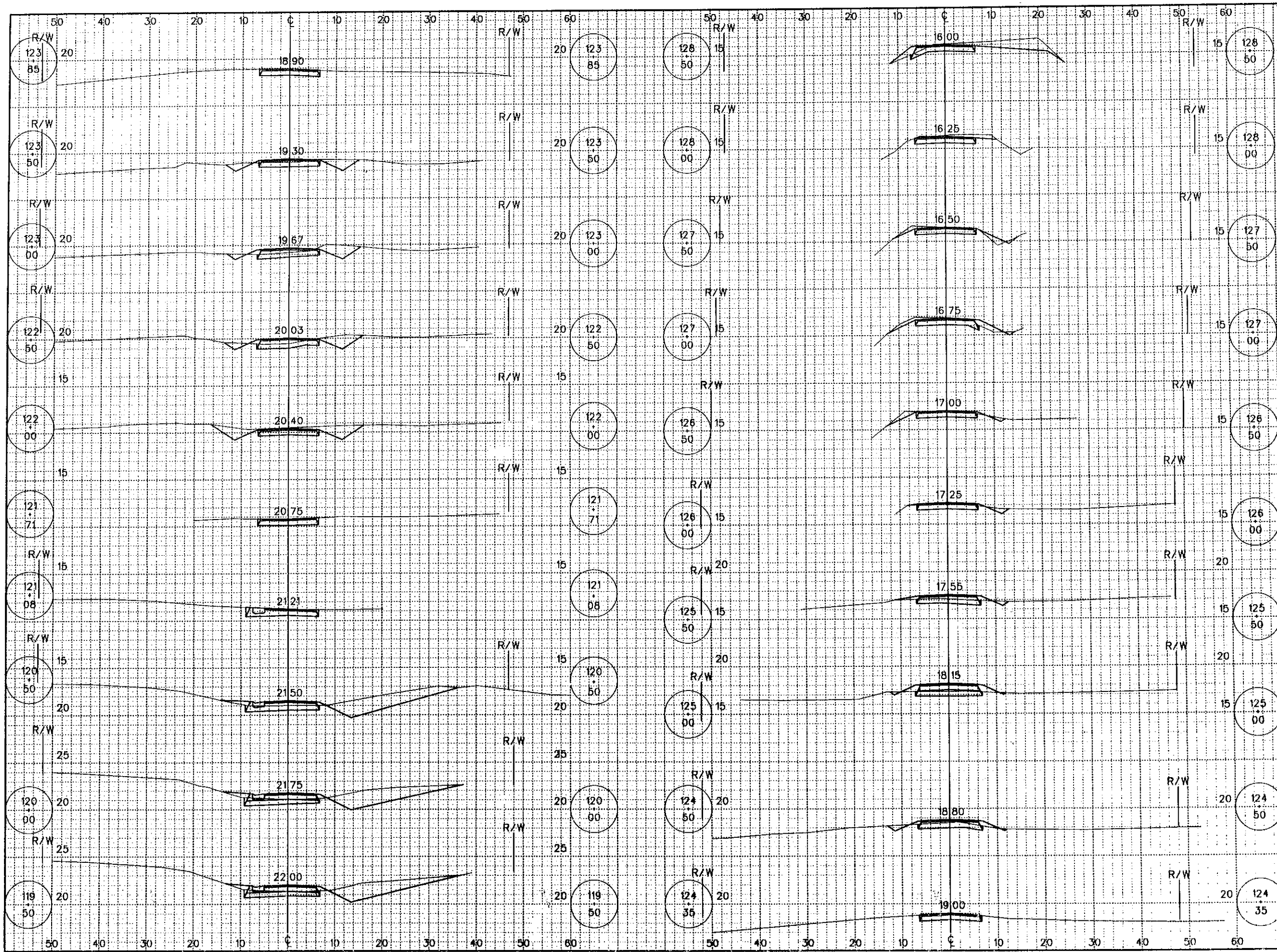
EDGE OF PAVEMENT 0.1' BELOW C  
UNLESS OTHERWISE INDICATED

#### CURVE #46 DATA

P.I. = 130+00.76  
Y 400,582.99  
X 2,175,795.14  
Δ = 63°58'48"  
D = 33°42'12"  
T = 106.19  
L = 189.83'  
R = 170.00'

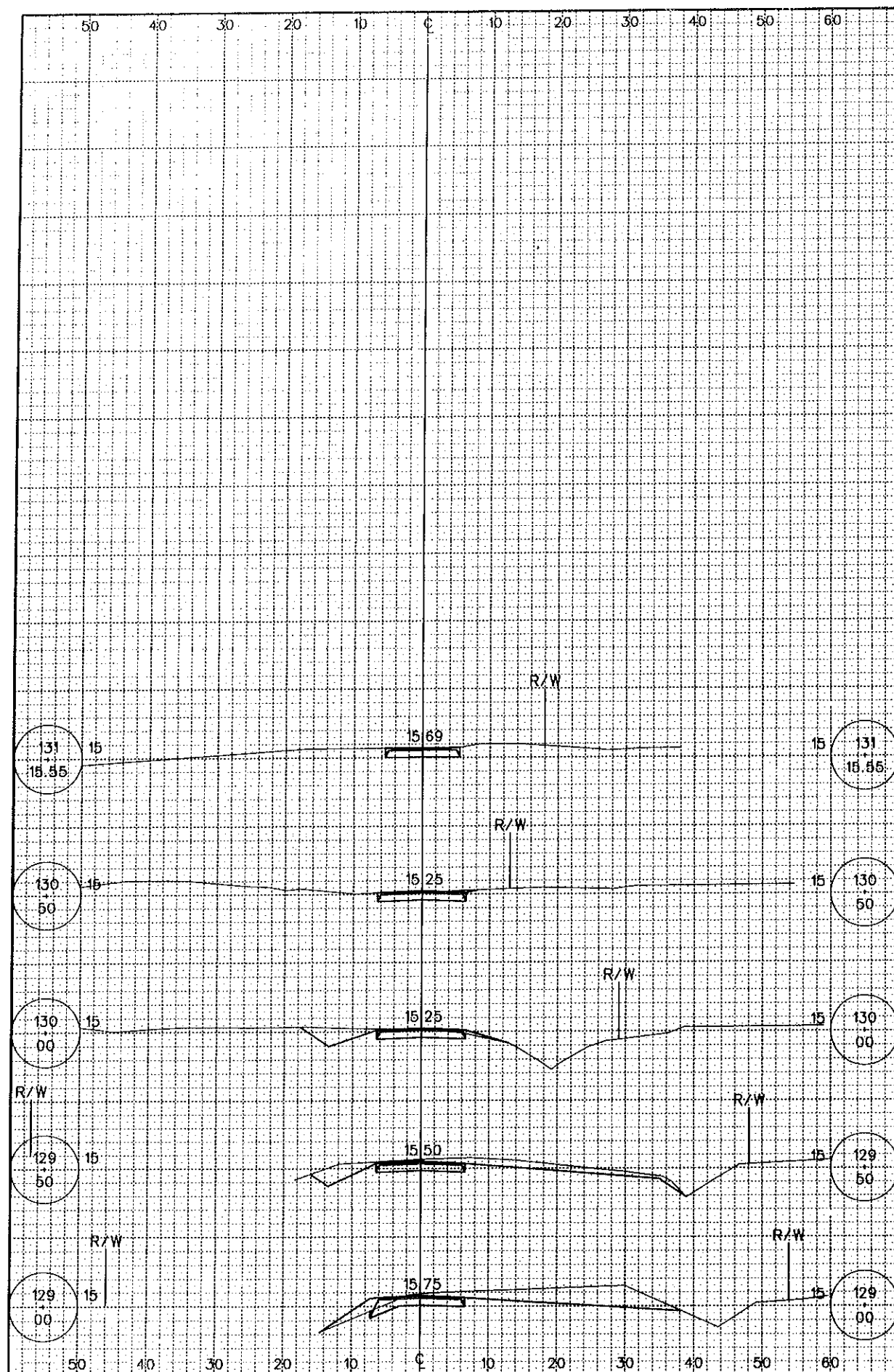
END PROJECT  
STA 131+15.55  
Y 400,521.76  
X 2,175,918.07





SCALE: 1"=10' HORIZ.  
1"=5' VERT.



SCALE: 1"=10' HORIZ.  
1"=5' VERT.

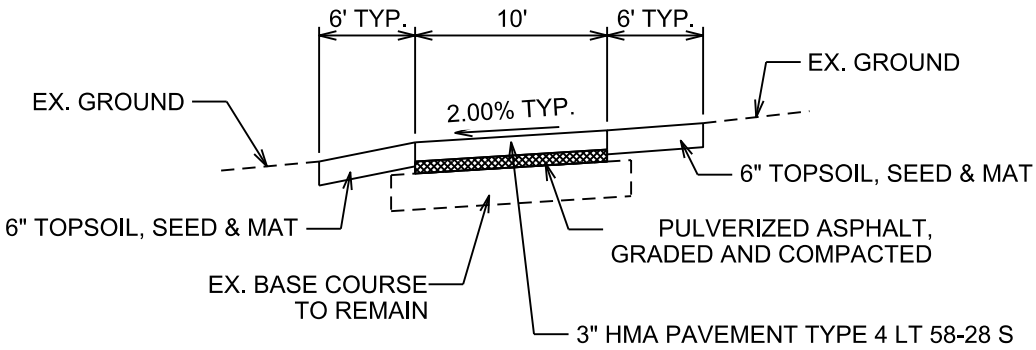
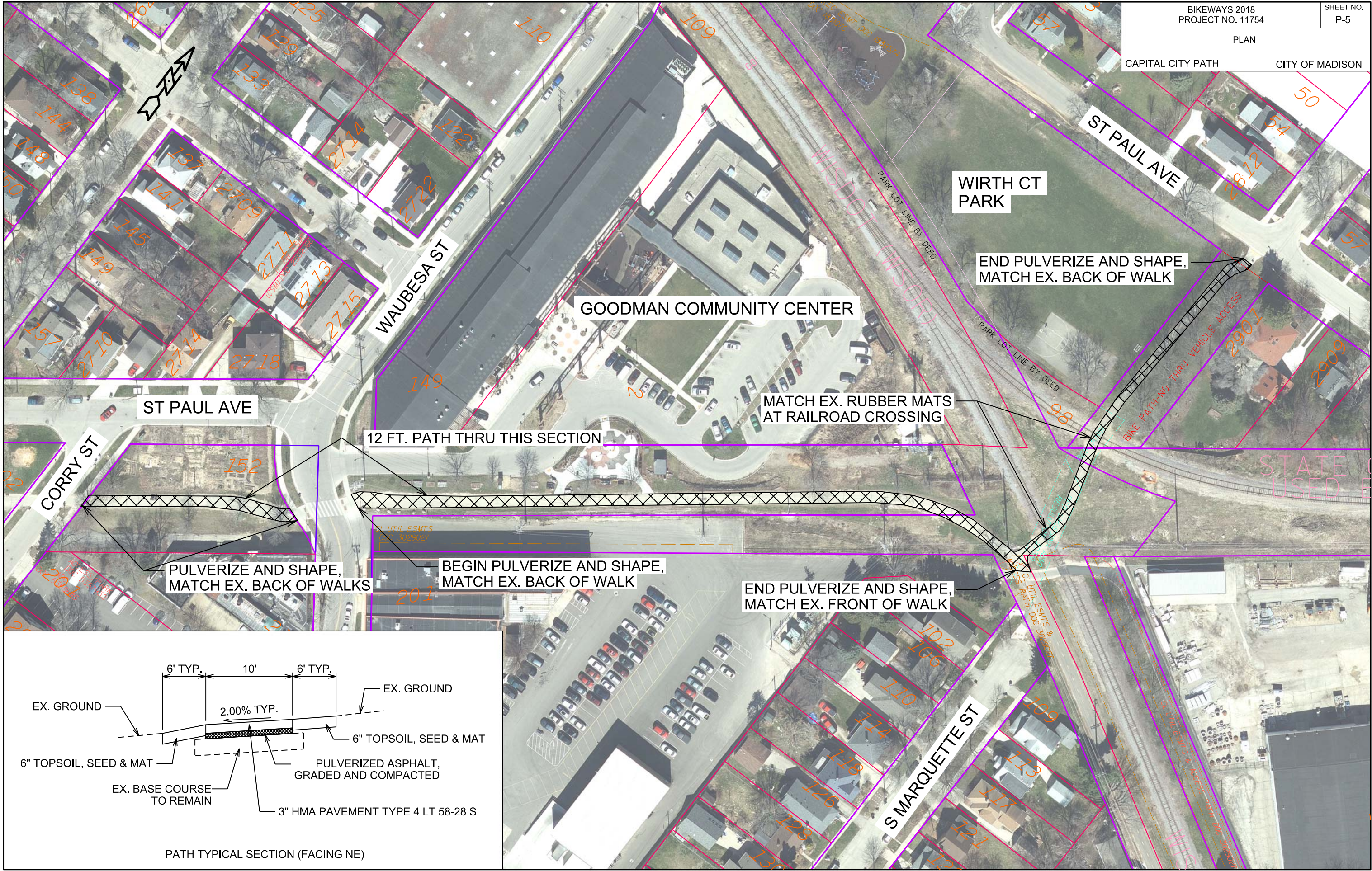


# Attachment 2

## Proposed Construction Plans for Bike Path

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PATH TYPICAL SECTION (FACING NE)